I CLAIM

1.   A communications system comprising a plurality of interconnected network
elements (NE), in which each NE comprises one or more ports, each port for
inputting from an adjacent one of the plurality of NEs a synchronisation signal
and a quality level indication (QLI) for indicating the quality of the source of the
synchronisation signal;

each port for outputting to the adjacent NE a selected one of the input
synchronisation signals and a QLI;

in which each NE is associated with a unique NE identifier;

in which each port of each NE is associated with a source identifier (SID) for
identifying the port at which each synchronisation signal is input;

in which each port of each NE comprises QLI means for setting the value of the
QLI output at that port based on a comparison of the SID of that port with the SID
of the selected synchronisation signal input port;

and in which the SID of each port comprises the NE identifier of the adjacent NE.

2.   The system as claimed in Claim 1 also comprising a central management means,
in which the management means comprises means for setting the SID of each port

of each NE to the appropriate NE identifier value.

3.   The system as claimed in Claim 1 in which each NE comprises sending means for

sending its own NE identifier to each NE to which it is directly connected.

4.   The system as claimed in Claim 3 in which the sending means is arranged to

repeatedly send the NE identifier.

5.   A method for indicating the quality level of synchronisation signals in a

communications system comprising a plurality of interconnected network

elements (NE), in which each NE comprises one or more ports, each port for

inputting from an adjacent one of the plurality of NEs a synchronisation signal

and a quality level indication (QLI) for indicating the quality of the source of the

synchronisation signal.

each port for outputting to the adjacent NE a selected one of the input

synchronisation signals and a QLI;

the method including the steps of allocating to each NE a unique identifier and

allocating to each port of an NE a source identifier (SID) for identifying the port

at which each synchronisation signal is input; receiving synchronisation signals

at the port or ports of each NE; associating each received synchronisation signal

with the SID of the port at which it is input; selecting for each NE one of the

received synchronisation signals for output from the port or ports of that NE;

comparing the SID associated with the selected synchronisation signal with the

SID associated with each port at which that synchronisation signal is output and setting the QLI output at each port acording to the result of the relevant comparison;

the method including the step of setting the SID of each port to the NE identifier of the NE to which that port is directly connected.

6.   The method as claimed in Claim 5 in which the communications system also comprises a central management means; the method including the step of operating the management means to associate each port with the appropriate NE identifier value.

7.   The method as claimed in Claim 5 including the step of each NE sending its own NE identifier to each NE to which it is directly connected.

8.   The method as claimed in Claim 7 including the step of each NE repeatedly sending the NE identifier.